

~~SECRET~~

*Jan 5-2543*

25X1

CENTRAL INTELLIGENCE AGENCY  
Directorate of Intelligence

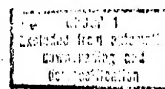
Intelligence Memorandum

Comments on Ambassador Sullivan's Cable on  
Air Operation in Laos, November 1967

Project S-2543  
December 1967

25X1

~~SECRET~~



25X1

DIA, State Dept. reviews completed

CENTRAL INTELLIGENCE AGENCY  
Directorate of Intelligence

INTELLIGENCE MEMORANDUM

Comments on Ambassador Sullivan's Cable on  
Air Operation in Laos, November 1967

Summary

1. In a cable of 27 November 1967 commenting on the air war in Laos, Ambassador Sullivan stated that 1) the total of trucks destroyed in Laos in November would in all probability exceed 600, 2) an overwhelming proportion of the truck "kills" had been on Routes 911 and 912 and as a result practically none of the North Vietnamese dry season cargo is reaching as far south as Route 9, and 3) "... if this rate of success continues, the entire inventory of trucks which the North Vietnamese hold for the Ho Chi Minh Trail activity will be wiped out before the end of this calendar year."

2. During November, Seventh Air Force pilots reported 531 trucks destroyed and 198 damaged, the highest monthly rate of destruction reported in Laos during the past two years (see Table 1). Ninety-eight percent of the trucks reported destroyed in Laos during November and 95 percent of those reported damaged were found in the Panhandle (Steel Tiger) Area of Laos. The number of trucks reported destroyed in Laos in November has been exceeded in North Vietnam only during the months of July and August 1967 when 603 and 743 respectively were reported destroyed (see Table 2).

3. The record level of reported destruction of trucks in November results from a combination of factors; (1) exceedingly good weather in Laos and the highest number of sorties over Laos since April, (2) the first full month of the dry season and an increase in traffic densities, and (3) possibly poor convoy discipline resulting from the use of inexperienced truck drivers. We know of no change in US tactics or weapons systems that would account for the increased effectiveness of US air attacks.

SECRET

25X1

4. We agree with Ambassador Sullivan that air operations in Laos were especially effective in November. Even allowing for the inflation known to exist in pilot reporting, a continuation of such heavy losses would seriously erode the North Vietnamese truck inventory in Laos and North Vietnam unless imports from the Communist countries increased substantially. It is to be noted, however, that reported truck losses in North Vietnam in November were light, only 50 destroyed and 66 damaged.

5. We disagree with Ambassador Sullivan's claim that practically no traffic is reaching as far south as Route 9. While road watch teams report little traffic south of Route 9, recent aerial reconnaissance covering the period 4-17 November shows that at least 15 percent of the trucks sighted in the Panhandle were operating on Route 9 or south of Route 9. Finally, there are anomalies in the data for November which cannot yet be explained. In November relatively more trucks were destroyed than damaged than in any previous period. In addition, only 6 sorties were required per truck destroyed or damaged compared to 35 sorties per truck destroyed and damaged in November 1966, when about the same number of sorties were flown but only 115 trucks were destroyed.

6. We believe that the November experience is heartening but it is still too early to conclude that a major turning point has been reached in the US air interdiction campaign in Southeast Asia. Based on past experience there is considerable doubt that the November performance in Laos can be sustained.

#### Comments

7. Exceedingly good weather prevailed in Laos south of Mu Gia Pass in November which made it possible to identify trucks at night to a much greater extent than is normally possible. Truck activity in Laos takes place almost exclusively during the hours of darkness, and approximately half of the 4,400 attack sorties in November were flown during these hours. Bad weather over much of North Vietnam made more attack sorties available for Laos (see Tables 1 and 2). November was the first full month of the current dry season in Laos, prompting the Communists to increase their truck traffic to and in Laos at this time. Truck traffic has increased substantially in November 1967 as compared with 1966. During two weeks from 1-14 November 1966, pilots reported sighting \_\_\_\_\_ about 160 trucks in the entire Panhandle of Laos. In the two weeks from 4-17 November

- 2 -

**SECRET**

25X1

1967, however, pilots reported seeing 1,722 trucks in the same area. These reports also showed substantial increases in truck movement on Routes 912 and 911 in 1967 as compared with 1966. No Road Watch Reports are available for Route 912, but for Route 15 these reports show about the same average number of trucks moving south per day for the period 1-25 November in both 1966 and 1967, but a considerably higher number moving north in 1967 than in 1966.

8. The desire to increase truck traffic during the month probably forced the Communists to use less experienced truck drivers new to the Laotian roads which may have led to poorer convoy discipline, thus making the trucks easier to identify and more vulnerable to air attacks.

9. During January through October 1967 it required 24 sorties to destroy and damage one truck but in November it required only 6 sorties. The only previous period which witnessed the same effectiveness in Laos was in April and May 1966, also periods of high traffic density, when it took only 8 and 6 sorties, respectively, to destroy and damage one truck. The average for all of 1966 in the Laotian Panhandle was 16 sorties. In North Vietnam the average for the period January 1966 - to date has been 22 sorties. Undoubtedly good weather and a large number of trucks on the road contributed to the increase in the kill ratio. We cannot fully explain its dramatic improvement in November and past experience suggests that it will not be possible to maintain it month after month.

10. The relationship between the number destroyed and the number damaged also changed considerably in November reporting. From January 1966 through October 1967 about half of the trucks attacked in the Laotian Panhandle were reported to be destroyed and the other half damaged (see Table 3). In November, however, nearly 75 percent were reported destroyed and the remainder damaged. Similar data for North Vietnam show 55 percent destroyed since January 1965. Although there has been a shift in favor of destroyed in the reporting from both North Vietnam and Laos during 1967 compared with 1966, the ratio of destroyed to damaged for November in Laos is the highest ever experienced in either country. We cannot explain this sudden change. It may merely reflect a change in the criterion used by pilots in their reporting, rather than a real change in efficiency of operations.

11. Pilots' claims of trucks destroyed or damaged are not an accurate measure of actual destruction rates. Operational conditions make it virtually impossible for pilots always to report

- 3 -

SECRET

25X1

~~SECRET~~

25X1

accurately as to whether a truck is destroyed or damaged. There is also duplication in reporting which analysts in OER attempt to eliminate. In addition, the Communists have the capability to cannibalize and repair some "destroyed" and damaged trucks. To take into account operational problems in reporting, duplicate counting and repair capability, OER and DIA have agreed to consider 75 percent of the trucks reported by pilots as destroyed and 25 percent of the trucks reported by pilots as damaged to be effectively lost. Applying these factors to the trucks reported destroyed and damaged in Laos during November 1967, effective losses become about 450.

12. Ambassador Sullivan's statement that "... the entire inventory of trucks which we believe the North Vietnamese hold for the Ho Chi Minh Trail activity will be wiped out before the end of the calendar year." has little meaning. The entire North Vietnamese inventory is the one of importance. If the November truck loss rates for effective losses in Laos can be maintained, and losses in North Vietnam increased, the North Vietnam truck inventory would be seriously eroded unless imports from other Communist countries are increased substantially. From January 1966 through November 1967 North Vietnam imported about 7,950 trucks, an average of about 345 per month. This rate has been sufficient to maintain the truck inventory at between 11,000 and 12,000 trucks since January 1966.

13. We agree that an overwhelming proportion of the truck "kills" during November were probably on Routes 911 and 912 (see the Map). But this does not necessarily mean that practically none of the dry season cargo reached as far south as Route 9. There is no assurance that all trucks moving south were destroyed. The Road Watch Team in the Mu Gia Pass Area, outside the target area, reported 343 trucks moving north and only 242 trucks moving south during the period 1-25 November. Moreover, our most recent report of aerial reconnaissance covering the period 4-17 November shows that at least 15 percent of the trucks sighted in the Panhandle were operating on Route 9 or south of Route 9. Furthermore, this report also indicated that, of the total of 1,464 trucks observed during this two week period on the routes north of Route 9, only 267 or about 18 percent were destroyed and damaged. For these reasons we think it highly unlikely that the North Vietnamese have been unable to move cargo as far south as Route 9 during November.

- 4 -

~~SECRET~~

25X1

SECRET

25X1

Table 1

Laos: Number of Trucks Reported Destroyed and Damaged  
by Air Operations  
1966 and January-November 1967 \*

<u>1966</u>	<u>Trucks Reported Destroyed and Damaged</u>			<u>Attack Sorties</u>	<u>Number of Sorties Flown Per Truck Destroyed and Damaged</u>
	<u>Destroyed</u>	<u>Damaged</u>	<u>Total</u>		
Jan	52	44	96	8,000	83
Feb	90	143	233	5,262	23
Mar	146	144	290	6,247	22
Apr	421	377	798	6,206	8
May	314	387	701	4,421	6
Jun	102	115	217	3,540	16
Jul	14	64	78	2,207	28
Aug	10	28	38	820	22
Sep	19	31	50	1,265	25
Oct	9	36	45	1,568	35
Nov	76	49	125	4,369	35
Dec	115	187	302	4,808	16
Total	<u>1,368</u>	<u>1,605</u>	<u>2,973</u>	<u>48,713</u>	<u>16</u>
<u>1967</u>					
Jan	103	88	191	5,570	29
Feb	117	169	286	6,752	24
Mar	131	99	230	5,326	23

SECRET

25X1

~~SECRET~~

25X1

Table 1 - continued

Laos: Number of Trucks Reported Destroyed and Damaged  
by Air Operations  
1966 and January-November 1967 \*

	<u>Trucks Reported Destroyed and Damaged</u>			<u>Attack Sorties</u>	<u>Number of Sorties Flown Per Truck Destroyed and Damaged</u>
	<u>Destroyed</u>	<u>Damaged</u>	<u>Total</u>		
<u>1967 - continued</u>					
Apr	133	92	225	5,160	23
May	55	62	117	2,523	22
Jun	51	35	86	1,441	17
Jul	26	29	55	1,299	24
Aug	37	24	61	1,241	20
Sep	18	27	45	1,668	37
Oct	60	73	133	2,922	22
Nov	531	198	729	4,400	6
Total (10 months)	<u>731</u>	<u>698</u>	<u>1,429</u>	<u>33,902</u>	<u>24</u>
Total (11 months)	<u>1,262</u>	<u>896</u>	<u>2,158</u>	<u>38,302</u>	<u>18</u>
Total 1966 and 11 months 1967	<u>2,630</u>	<u>2,501</u>	<u>5,131</u>	<u>87,015</u>	<u>17</u>

\* These are unadjusted figures as reported by pilots. Both CIA and DIA accept only 75 percent of the trucks reported to be destroyed and only 25 percent of the trucks reported to be damaged as effective losses.

~~SECRET~~

25X1

SECRET

25X1

Table 2

North Vietnam: Number of Trucks Reported Destroyed  
and Damaged by Air Operations  
1966 and January-November, 1967 \*

	Numbers of Trucks			Number of Attack Sorties	Number of Attack Sorties Per Truck Destroyed and Damaged
	<u>Destroyed</u>	<u>Damaged</u>	<u>Destroyed and Damaged</u>		
<u>1966:</u>					
Jan	-	-	n.a	130	n.a
Feb	22	14	36	2,810	78
Mar	85	124	209	4,490	21
Apr	83	96	179	5,450	30
May	105	74	179	4,470	25
Jun	178	164	342	7,790	23
Jul	389	322	711	10,200	14
Aug	496	393	889	11,310	13
Sep	259	292	551	12,350	22
Oct	113	154	267	8,700	33
Nov	137	128	265	7,260	27
Dec	68	40	108	6,710	62
1966 Totals	<u>1,935</u>	<u>1,801</u>	<u>3,736</u>	<u>81,670</u>	<u>22</u>
<u>1967:</u>					
Jan	22	41	63	6,580	104
Feb	82	51	133	5,470	41
Mar	74	80	154	8,500	55

SECRET

25X1



Table 2 - continued

North Vietnam: Number of Trucks Reported Destroyed  
and Damaged by Air Operations  
1966 and January-November, 1967 \*

	Numbers of Trucks			Number of Attack Sorties	Number of Attack Sorties Per Truck Destroyed and Damaged
	<u>Destroyed</u>	<u>Damaged</u>	<u>Destroyed and Damaged</u>		
1967: - continued					
Apr	103	179	282	8,960	32
May	384	134	518	11,330	22
Jun	332	326	658	11,470	17
Jul	603	235	838	11,310	13
Aug	743	441	1,184	11,890	10
Sep	284	142	426	8,920	21
Oct	103	93	196	9,370	48
Nov	50	66	116	7,187	62
11 months 1967	<u>2,780</u>	<u>1,788</u>	<u>4,568</u>	<u>100,987</u>	<u>22</u>
Total	<u>4,715</u>	<u>3,589</u>	<u>8,304</u>	<u>182,675</u>	<u>22</u>

\* These are unadjusted figures as reported by pilots. Both CIA and DIA accept only 75 percent of the trucks reported to be destroyed and only 25 percent of the trucks reported to be damaged as effective losses.

SECRET

25X1

SECRET

25X1

Table 3

North Vietnam and Laos: Comparison of the Number  
of Trucks Reported Destroyed and Damaged  
1965-66 and January-November 1967 \*

	<u>Destroyed</u>	<u>Damaged</u>	<u>Destroyed as Percent of Total</u>
<u>North Vietnam</u>			
1965	318	487	40
1966	1,935	1,801	52
1967 (11 months)	2,780	1,788	61
Total	<u>5,033</u>	<u>4,076</u>	<u>55</u>
<u>Laos</u>			
1966	1,368	1,605	46
1967 (11 months)	1,262	896	58
Total	<u>2,630</u>	<u>2,501</u>	<u>51</u>
<u>Laotian Panhandle</u>			
1966	1,243	1,508	45
1967 (10 months)	609	573	52
November	520	186	74
1967 (11 months)	1,129	759	60
Total	<u>2,472</u>	<u>2,267</u>	<u>52</u>

\* These are unadjusted figures as reported by pilots. Both CIA and DIA accept only 75 percent of the trucks reported to be destroyed and only 25 percent of the trucks reported to be damaged as effective losses.

SECRET

25X1

This map illustrates the road network in North Vietnam, distinguishing between Communist-controlled roads, principal Communist trails, and other roads. The map covers the northern part of the country, showing major cities and the Gulf of Tonkin. A legend in the top right corner defines the line styles used for the different road types. A scale bar indicates distances in miles and kilometers. The map also shows the borders with China, Laos, Thailand, and Cambodia, as well as the DMZ (Demilitarized Zone) separating North Vietnam from South Vietnam.

**Legend:**

- Communist roadnet
- Principal Communist trail
- Other road

**Scale:**

- 0 to 75 Miles
- 0 to 75 Kilometers

**Geographical Features:**

- North Vietnam:** Major cities include Thanh Hoa, Phu Qu, Phu Dien Chau, Vinh, Ha Tinh, Quang Khe, Dong Hoi, Ben Quang, Quang Tri, Hue, Da Nang, Ben Giang, Tam Ky, Kontum, Pleiku, Hau Bon, and Stung Treng.
- Gulf of Tonkin:** Located to the east of North Vietnam.
- China:** Located to the north of North Vietnam.
- Laos:** Located to the west of North Vietnam.
- Thailand:** Located to the southwest of North Vietnam.
- Cambodia:** Located to the south of North Vietnam.
- DMZ (Demilitarized Zone):** Separates North Vietnam from South Vietnam.

**SECRET**

**GROUP 1**  
EXCLUDED FROM AUTOMATIC DOWNGRADING  
AND DECLASSIFICATION

Approved For Release 2002/10/21 : CIA-RDP78T02095R000800030031-5